

## **Research for Marketing Decisions**

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### **Questionnaire Design: Initial Steps 1 to 5**

So, today now we are going to start with today's topic. Let me get started please. So, we are going to discuss about the questionnaire, the survey form. So, so far we have been discussing about measurement, scale, scaling, Likert, item scale, multi-item scale, conceptual definition, operational definition. Now, all of these have to come together in the questionnaire.

The form that we will give hand over to the respondents that is what we are going to do we are going to study now creating that questionnaire which will have all these questions and several more questions, and we are going to see the process and understand what is a questionnaire. So a questionnaire is the same as the survey, it is just, it has structured questions mostly, but there are options of open ended questions as well. A questionnaire is a form, a questionnaire is also called a survey or a form or survey instrument, it has mostly structured questions, but there is also opportunity for putting some open-ended questions. How to develop a questionnaire? There is no hard and fast rule.

There are only guidelines and that we are going to look at. What should be the objectives of the questionnaire? Can somebody tell me? Objectives of the questionnaire together in can you be more precise, together information on the variables that we have in our hypothesis and research questions, which we are going to measure, so questionnaire objective is to gather information on all these variables in a way that is easy

and understandable for the respondents. So these are the you know whatever I said, it's broken down into three, a questionnaire should look appealing to complete, should not be overcrowded, should have all the questions that give answer to my variables, this is a questionnaire design process. 10 step process is there and we will look at each and every

step. The first step is specify the information needed. What is the first step? Specify the information. What does it mean?

It means you write down all the variables on which you would like to collect the information. Specify the information needed. If you remember, it is the last step of the last thing in the step number 2. Specify the information needed. Before you develop the questionnaire, write down what all information you would require.

Age, gender, occupation, Relationship status A, B, Z everything write down. So that you have questions for each one of them. That is specify the information you need. If you leave a particular question that is important and you conduct the survey then gone.

There is an it is not that you can just like in the train there is an option of pulling the chain. The train stops here. If an important variable is missed you have collected the data gone. So that is why this first step is very very important. Second step is specify the type of interviewing method, whether you want to, let's say, do the electronic survey on the website or email, or you want to give personal survey face to face, or you want to give mail survey over there mailbox postal mail. Specify that type of interviewing method. Why?

Because it has an impact on the wording of the question, the format that used for the question. For example, for a particular department store project. For a mail questionnaire which means this questionnaire which is sent over postal mail. The question reads like this that is given on your screen. Please rank order.

10 stores in terms of in order of your preference. Give rank 1 to the one you prefer most. Rank 10 to the you prefer least. That is when you send over postal mail. The same thing rank order if you want to see through telephone.

You cannot say ABC 10 stores because if you want to arrive at rank order you can do that by measuring them on by measuring them through rating and then later on arriving at ranks. From rating you can go to ranking. When you are asking in telephone you can say how much you prefer buying from this store 1 to 10, 10 strongly prefer, 1 not at all prefer. Store number 1, store number 2. Prefer store number 1, store number 2.

That will be easy on the telephone questionnaire. And then whatever score you got, you can arrange based upon then rank order 1, 2, 10, whatever. If face to face, it can be done in this way. That is given on the screen. You have 10 cards.

10 cards. You can give cards as it is written. Here is a set of department store names each written on a separate card. Please examine them carefully and then give me the card for the store that you prefer most. And in that order.

That is face to face. There is a different way of doing it. That is why the questioner would become different for different type of interviewing method. So it is similar to let's say if you are angry on somebody, you want to show anger in a professional setup you will use a different language, personal setup you will use different language right? likewise this depending upon type of interviewing method you will use different format of questionnaire, of each particular question. So the second step is over, The third is determine the content of individual. After we know after we know these two steps the step number two is

content of individual questions that we are going to put now, we will determine that, and for doing that please look at the exercise sheet that you have so you have a worksheet like this right? where step number three is written and we will identify how to determine the content of individual question in the survey, so one is we have the multi item scales that is fine, but there also we can improve those wordings and the other questions which are other than the multi-item scales for them also all these steps are valid for multi-item scales also these steps are valid. So let us look at step number 3. What is step number 3? Determining the content of the individual questions.

So one of the question is given on the left side one some statements questions are given and they have some problems. You have to tell me what are the problems with them so that we know what is the What are the popular or common concerns when we are determining the content of individual questions that need to be taken care of? You know, yawning is very contagious. I cannot, but I can see.

But you know, when your friend yawns, you also would yawn and the third person who is looking at also would yawn. But when you stand here, you do not. It goes away. Okay, so determining the content of individual question. The first one is, do you think Coca-Cola, if somebody asks you, do you think Coca-Cola is a tasty and refreshing soft drink?

Let's say yes or no. What is the problem with this statement? It's a leading question. What is the meaning of leading question? Basically asking them to give you the answer that you are looking for.

But you are saying, do you think Coca-Cola is a tasty and... Okay, in a way, let's say, okay, there is, there could be possibility of leading question. A good, very good observation, which we will look at in the questions to come. But here, I wanted to look at some other issue. But a very good observation. Possible that it could be a leading question.

So, what she is saying is, Do you think Coca-Cola is a tasty and refreshing soft drink? If you say yes, it means it is tasty and refreshing. If you say no, it means both. But if you find one as tasty, other as... If you say that it is tasty but not refreshing, how would you answer?

Or sometimes people would not understand the and, or things which are written. If you say yes, it will be yes, both. No? No. But no, people also would say that no means what?

Both? Yes. Is it for both? Do you think Coca-Cola is it tasty or for one or which one of them? So generally these kind of questions when you are putting and or in the same statement that is wrong.

These are called double barreled questions. So the first concern is doubled barreled questions, double barreled questions, your question should not you should avoid writing combining two things together, two characteristic of an object two things together in a single statement, and asking strongly agree, you should not do that. How would you write it correctly, you can write both statements separately, is it tasty, is it refreshing? So this problem will be taken care of leading question might not be taken care of that we will see later on. Next one is why do you shop at Zara?

What is the problem with this question? I said open-ended are possible. So, I said questionnaire is mostly structured, but there are possibilities of unstructured questions as well, open-ended questions as well. Why do you shop at Zara? For example?

Because it is convenient for me. It suits my status. Yes, the respondent might not shop at Zara, but let's make an assumption that we are going to a customer who shops at Zara. That is also good observation, but since I wanted to bring some other point, but it's a good observation. That is also very good observation that why do you shop at Zara?

So in-depth interview would bring the actual reason, but this might not. But I did not. I want to bring some other issue in this survey. That is the limitation of doing a survey. But what is the problem in this question?

Yeah. We are trying to measure certain attributes of any particular product. This might give us very different attributes. Yeah, this will be open-ended. This is an open-ended answer, right?

Here, we will not get any quantification. But that is acceptable. As I said, you can include some open-ended questions in a questionnaire. Somebody said because we are looking at the multiple attributes and so let's say why do you shop at Nilgiris? One would say I like the variety here more than the other stores.

Other would say my mom shops here, or my friend told that it has good variety and quality. My friend recommended it. The other reason could be I shop here for Nuts. Special nuts.

So if you look at all of these three things, why question, you will get answers to three different sub-questions. What are these sub-questions? One is Question is not specific. So how you will write it?

There are three. So you can get three different answers to three different specific questions. So why do you shop at Nilgiris? One is my friend recommended it, which means the question could be how did you come to know of Nilgiris? Second is it has more variety than other stores.

How do you compare Nilgiris with other stores? That would have been the two questions. Another question, I shop for nuts. What do you buy at Nilgiris? So, why question has some questions hidden inside.

So, better use those specifics rather than asking why in a survey. In in-depth interviews, differently. As we said, we had that ladder thing. So, which means if you are asking why, better to break it down into three underlying questions. Now the next one is step number 4A.

Third step is complete. So when you are developing a questionnaire, you have to keep these first step three are complete. Step number four is overcoming inability to answer. Which means you have to overcome respondent's inability to answer. So that they can answer correctly.

The idea is get closer to the truth. Step number 4 is, you have to frame the question in such a way that respondents is able to answer, not unable to answer. What is the problem

in this first one? If it is asked to husband what is your family's last month expenditure on milk? Assumption is that

The husband would be unaware of expenditure on milk consumption. At least the generation, not my generation, definitely not your generation, but a generation before my generation. If the survey is for them, so the husband would not be aware of. So if you are asking a husband for consumption, he would give some answer that would not be true. That would maximum be approximate.

You do not want things to be approximate. That is why you should, what you should do, you should ask these questions to the person who is knowledgeable about this. So that is one, overcoming inability to answer, which means when you are asking questions, ask the respondent who is aware of that thing, not somebody who is not aware of that thing. Next time what is the problem? Next question.

How many times did you personally go out to buy groceries in the last month? What is the problem? May not remember. So ask the question in a way that the person would remember. How many times did you personally go out to buy grocery in the last month?

Instead of saying that, can you say on an average or in a typical week, how many times do you personally, you personally, you can write you personally, not your family members to prevent misinterpretation, right? So, which means you can ask In a typical week, how many times do you personally go out to buy groceries? Whatever number is given, if you want to measure in the month, multiply it by 4. You will get your answer, right?

So, the person may not remember in the way you have asked, but ask in a different way so that the inability to answer comes down. The next one is, Describe the atmosphere of the departmental store you most often visit. If you ask this to a respondent, describe the atmosphere of the department store. Atmosphere of the department store.

First of all, atmosphere is the wrong word here. But let's say they understand, describe the, you are asking somebody from the marketing class, describe the atmosphere slash ambience of the department store you most often visit. Sir, the respondent might not know what are the components of the atmosphere. Ah, definitely. Like, how I will describe the atmosphere, that might not match with how he will describe the atmosphere.

Ah, that is fine. So the problem here, yes, your issue is also right that he would not know dimensions or constituents that we also do not want him to know. He can answer in his own way. Boring. But it is about the ambience of the department store.

No, you might want people to tell you whether the ambience, what was the ambience like? Whether it was, you know, lively, well-lighted, full of life, active. Problem here is the articulation. Every respondent would not be able to articulate it. Problem here is there could be other problems, but one of the problem here is articulate.

Everybody would not be articulative enough for you to give the answers. You might if you do the if you do such studies you might also come across respondents who when you ask question they would just run away by seeing you. Have you seen that Big Bang Theory? Raj is there. Sometimes he runs away when asked a question, especially by the opposite gender, right?

So this would happen when you do go to a store, sometimes you ask question. So here you are asking a difficult question. Describe the ambience or atmosphere. Even if I give this in the exam, some people would not be able to articulate it. And then they will raise hand and ask, sir, atmosphere, what should I write?

So this is how confusing it is. So the idea is, what should be done? You should ask, either you give them 10 adjectives and tick them. How did you find the ambience of the store? Tick among them.

That is one way. So you have to make them articulate. So articulation problem, you have to overcome that articulation. How can you do that? In this way.

But if we give them adjectives, wouldn't we be influencing them? Yes. But that's why give the popular adjectives that you think could describe. And you can also give any other. Now the next one, look at the overcoming adjectives.

Unwillingness to answer, this is also part of step number 4, this is 4b, overcoming unwillingness to answer, sometime people would be unwilling to answer, if you ask them how many times do you how many times let's say you are taking a survey how many times do you brush your teeth? somebody say I am not willing to answer, why should I answer you, who are you? relationship let's survey relationship status How does it concern you? How you can overcome this unwillingness to answer for questions? Let's look at the first question. How many liters of milk did you consume in the last month?

Yeah, they will also not be able to remember. But here we are looking at another issue. Unwilling to answer. How many liters of milk did you consume in the last month? What is problem with this?

People would not be willing to put the effort. Why should I calculate into one day how many packets, half liter, 3 into 30? Why should you want respondent to do that? Why can't you ask this question, that how many liters of milk do you consume on a typical day? Day you ask, and multiply by 30 on your own.

You have to minimize the effort that is required of the respondent to answer your question. How much water do you drink in a day? How do you answer this? One drum, one jug, one glass, ten glasses, glass size is also different. You will have to, if I say green tea consumption and somebody says one cup, seven cups,

So what is size of the cup? That also if you say 100 ml, people also do not know what is 100 ml, 200 ml. So how do you say it? This all you will face. The next one is, please list all the sections from which you purchased on your most recent shopping trip to a retail store.

What is the problem? Somebody who comes to IIT, please write down all the locations you went inside the IIT when you visited it. Let's say IIT Madras is doing this survey to find out where people most often visit or where people visit when they come to IIT. Please list all the locations. Specific locations or specific department center slash where you went during your visit to IIT. Again here the problem is you are requiring people to put effort, why don't you give all the departments and centers and say tick the ones you visited to make it easy for them so that they do not have to recall they have to only recognize where I went.

So the next one, a fast food restaurant asking to a customer, do you wash your hands before every meal, when they are dirty, after going to the toilet, when you blow your nose or not very often? What is the problem here? Yes, what is the problem here? You are going to a fast food restaurant, they are asking you this question, do you wash your hand before every meal, when they are dirty, after going to the toilet, when you blow your nose and so on? You would say, why should I answer?

How does this concern? I come to eat, give me food, take money, I go away. When you don't, but if you want answer, what you will do? You will say, you will make this



question look legitimate. You will say, we are concerned about the health and hygiene that we provide to our premium customers like you,

and in order to provide you best of the hygiene and experience, we are asking you and every other customer the questions about their personal hygiene. Would it be appropriate for you to answer or it will be, we will appreciate if you answer this question. So, you are legitimizing the purpose of this. Even then many will not answer, but at least the legitimate purpose is known now.

Let's say if in the admission form, if in the application form, admission form of IIT, MBA it is written. What is your relationship status? Married, unmarried, single, in a relationship. You would say what is this? I want admission in MBA or why it is all asked?

You will, some people will leave it open. Right? But if we, if it is written that it is seen that this program is very rigorous and stressful, we are identifying whether people have enough social support for them to help to complete the program. Please answer. You are legitimizing the question and then people will answer.

Otherwise, they will not answer. The next one is also similar. A restaurant asking to a customer, what is the television serial you like best to watch? What is this? Then you have to legitimize saying that we are worried, we are concerned about the entertainment that people get at the restaurant while they have their meals.

Because we have, you know, we are going to let's say invest in entertainment, electronic related to entertainment, and they subscribe the channels and so on. So, you have to legitimize this. Context has to be set up for the question. Next one.

If the question is asked, have you ever hit someone with your vehicle? If you have to ask this question, let's say you are from... You are from traffic police. And you are... Doing this survey nationwide and this question, have you ever hit someone with your vehicle? What you will say?

Nobody will say yes, right? Now, how to get people to give the right answer? No problem, confidential, we will not take any action. Name, do not mention, email number, phone number, don't mention anything. Then also people won't answer sometimes.

That is possible but then how so that is here the idea is that how many times you hit with your misdriving, not how many times, you can be walking and get hit, you cannot have

an assumption from that about whether you were driving it right or not. One way is that, say that, in recent survey, it was observed that 80% of the drivers having the license have been, have hit someone at least once in their you know, after they obtained the license. How many, then you ask, have you ever hit someone? You see the numbers are 80% though.

If I haven't, you will at least try to write the right answer, right? You would not lie. Because this is it. So, sometimes you would have to do that. Otherwise, sensitive question, you won't, this is sensitive question, you won't get the right answer.

In one of my studies, we did that where we were asking about the buyer in the B2B business whether they pass any sensitive information to a particular seller. So we had to use a particular statement. It is seen that somebody with whom you have a good rapport and so on, we say the buyers who have good rapport with certain salespeople, it is seen that 80% of them and so on. You have to get the right answer. The idea is to get closer to the truth.

In sensitive questions, how do you do that? One of the ways is this. Other ways, have the sensitive question in between crowded questions. That is one way. So, it need not be factual.

Best is if it is factual, but if you are not getting any fact regarding that, you can actually you know make these statements because you know saying that this is a sensitive question so, one of the ways to get the right answer to a sensitive question is normalizing that situation using this, so you can do that yes, but that you will have to address before you make the questionnaire.